

ABSTRACT OF THE DISCLOSURE

There is provided a semiconductor device configured as follows. On a semiconductor substrate, a titanium oxide film which is an insulating film having a higher dielectric constant than that of a silicon dioxide film is formed as a gate insulating film, and a gate electrode is disposed thereon, resulting in a field effect transistor. The end portions in the gate length direction of the titanium oxide film are positioned inwardly from the respective end portions on the source side and on the drain side of the gate electrode, and the end portions of the titanium oxide film are positioned in a region in which the gate electrode overlaps with the source region and the drain region in plan configuration. This semiconductor device operates at a high speed, and is excellent in short channel characteristics and driving current. Further, in the semiconductor device, the amount of metallic elements introduced into a silicon substrate is small.

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